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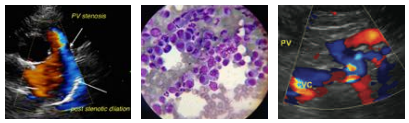

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DATE
11/30/21

PATIENT
Chet Nastasi

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Neutered male

AGE
11/29/16

WEIGHT
13.3 lbs

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY
Rachel Brilhart RDMS

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Thompson

INVOICE
94205

PRESENTING CLINICAL SIGNS

History: Presenting Complaint: Kidney Stones. Date: 11-29-2021 Notes: Chet is a 5 y/o MN DSH who presents as referral for continued care - vomiting since Tuesday, mostly liquid - vomited up a twist tie for bread - continued to vomit through the weekend, progressed to not eating or drinking - urination normal, no feces production that O has seen - No C/S/D - no previous medical history - no known toxin exposure - will eat foam mats, history of eating toys or other objections - indoor only - see by RDVM: BW and AXR performed, AXR unremarkable, BW elevated renal values and LE Medications: - none, no preventatives. Assessment: Elevated BUN/Creat, Vomiting, anorexia; AKI (infectious vs toxin vs other) vs Acute on chronic kidney disease vs pyelonephritis vs other, Elevated LE; Cholangiohepatitis vs HL vs pancreatitis vs other. Plan: Recommend hospitalization, repeat bloodwork, AUS, urinalysis, urine culture, BP and supportive care. Discussed concerns for elevated renal values and liver values, may not be a single process going on. Discussed AKI vs toxin vs acute on chronic vs other, discussed HL vs cholangiohepatitis. Owner elects to move forward with hospitalization and treatment.
Lab Results: Attached separately.
Radiographs: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (4.89 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Mild pyelectasia was noted and measured 0.17 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.81 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Mild pyelectasia was noted and measured 0.18 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.41 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas
The pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. The pancreatic duct is prominent at 0.19 cm. There is evidence of regional mesenteric inflammation. This is consistent with mild pancreatitis.

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of free fluid. There is a prominent mesenteric lymph node near the ileocecal unction visualized and measured 0.42 cm. The omentum is of increased echogenicity around the pancreas and the ileocecal junction.

ULTRASONOGRAPHIC FINDINGS
PRIMARY FINDINGS:

- Hypoechoic, prominent pancreas with surrounding hyperechoic mesentery. The pancreatic changes are most consistent with mild pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

- Heterogenous liver. Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.

- Mildly reduced corticomedullary distinction in both kidneys with mild pyelectasia. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of both kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

SECONDARY FINDINGS:

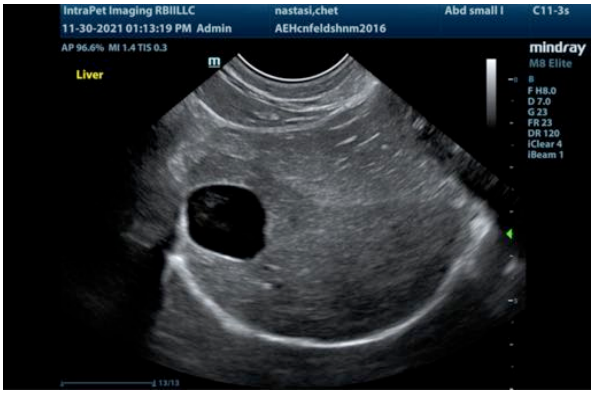
- Prominent mesenteric lymph node near the ileocecal junction. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

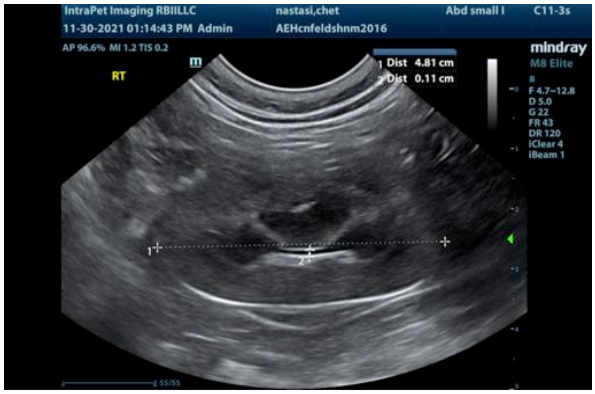
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

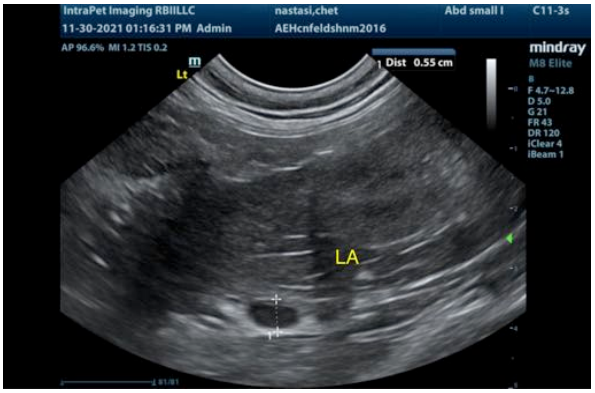
The changes observed on today's scan were relatively mild and non-specific. The pancreatic changes seem most prominent. Correlate these findings with a GI panel to Texas A&M University with a qualitative fPLI, TLI, cobalamin and folate, which will additionally look for evidence of small intestinal disease.

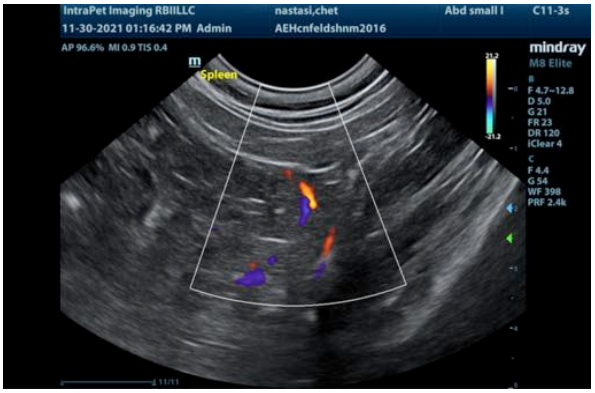
No lesions were visualized associated with the liver. Depending on the degree of liver enzyme elevation you can consider a liver function test and a FNA of the liver.

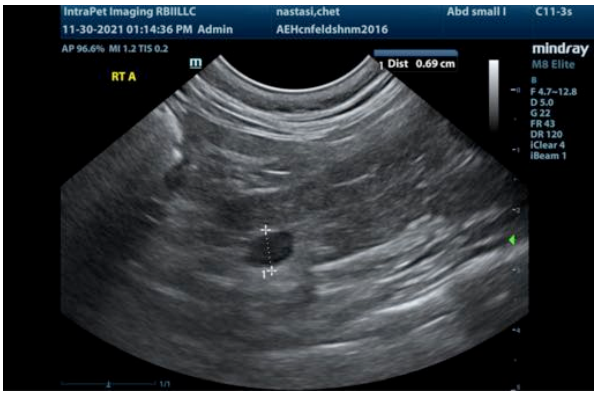
The history provided revealed a normal blood pressure evaluation and urinalysis and urine culture test. This is a solid plan. There was no evidence of obstruction or foreign material was noted, but with the history of the vomited twist tie this would always need to be considered particularly for vomiting if not responsive to medical care.

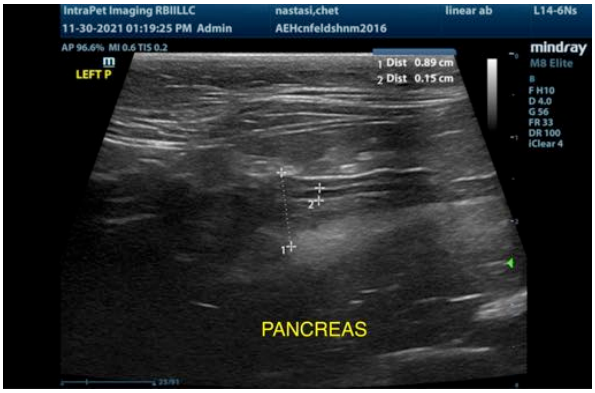












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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